



Write out your solutions to these exercises within a bound journal or using an electronic tablet with pen. It's expected that you'll be using a lot of space! Mastery only comes with ample practice. Enjoy the journey!



Chapter 8

Equations—Exercises

8.1 Equations

No exercises.

8.2 Solving Equations

Solve the following equations by inspection. What value of the variable makes the equation true?

(a) $x + 7 = 22$

(b) $2x - 5 = 15$

(c) $4x = 32$

(d) $\frac{x}{5} = 3$

8.3 The Principles of Equality

Use the Principles of Equality to solve the following equations.

1. $3x + 5 - 2x = 4x - 4$

2. $3(2x - 1) = 3x$

3. $5x - 11 = x + 3$

4. $3x + 5 + 5x = 2x - 7$

5. $2a - 16 = 8a + 4$



6. $7a + 5 = 61$

7. $2x \div 3 = 20$

8. $17 - 3x = 8$

9. $12x - 4 = x + 18$

10. $3x + 6 = 3(x - 4)$

11. $12 - 2x = 8x + 5 - 4x$

12. $5(3x + 4) = 15x + 20$

13. $3(2x + 1) - 12 = 4x + 3$

14. $7(x + 4) + 3x = 2(5x - 7)$

15. $9x + 11 - 2x = 4x + 26$

